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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,363	10/16/2001	Takeshi Nishiuchi	991406A	4158

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EXAMINER

OLTMANS, ANDREW L

ART UNIT PAPER NUMBER

1742

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,363

Applicant(s)

NISHIUCHI ET AL.

Examiner

Andrew L Oltmans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 10 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 10 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All. b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/461,006.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7, 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on May 21, 2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent No. 6,251,196 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japanese Patent JP 07230906 A

3. Claims 9-10 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent JP 07230906 A (JP '906).

JP '906 teaches a method of forming a metal oxide (i.e. silicon oxide) on a rare earth metal permanent magnet, wherein the method includes coating the magnet using a sol-gel coating process (abstract; see paragraphs [0026] and [0027] of the English language translation). Also in paragraphs [0026] and [0027] the method is taught as including both a silica system precursor and an organic system (i.e. carbon containing) precursor wherein the process includes the polycondensation of the mixed precursor system (paragraph [0026] and [0027]):

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[0026] That is, the mixture which mixed the silica system precursor and the organic system precursor at a desired rate can be used for the **sol which consists of a silica system precursor and an organic system precursor** first as ORUMOSHIRU of sol formation, it can add acid water, such as a hydrochloric acid, a nitric acid, and a sulfuric acid, to this, can fully agitate it, and can be easily formed by making hydrolysis and a polycondensation occur.

[0027] Here, on the occasion of formation of gel, it will be desirable % and to 30-70-mol consider [% and 30-70 mol] as 30-50-mol %/50 - 70-mol % preferably, and, less than [30 mol %], a sol will divide [a silica system precursor component] the rate of a silica system precursor component / organic system precursor component into two phases. Moreover, at more than 50 mol %, in order that a sol may gel for a short period of time, it is not desirable.

[emphasis added by examiner]

JP '906 further teaches that the organic system precursor include epoxy system precursor or vinyl system precursor (paragraph [0022]):

[0022] Moreover, as an example of the methacrylate system precursor in the above-mentioned organic system precursor component, 3-glycyl oxy-propyltrimethoxysilane (GPMS) etc. is mentioned as an example of an **epoxy system precursor**, and ORGANO modification door RUKOKISHIDO, 3-metacryloxy chill trimethoxysilane (MPMS), etc. are mentioned for vinyl-triethoxysilane (VES) etc. as an example of a **vinyl system precursor**, respectively.

[emphasis added by examiner]

JP '906 teaches the addition of oxides that form the basis of the coating (i.e. precursor) in the amounts instantly claimed (paragraph [0031]).

~~JP '906 fails to meet all the limitations of the instant claims in that JP '906 does not~~
explicitly teach the inclusion of carbon, the amount of carbon or the interfacial layer of the metal oxide film with the R atom chemically bonded with the film forming metal atom through the oxygen atom.

With respect to the inclusion of carbon, it is noted that the "carbon" claimed in claims 9, 14 and 16-17 is defined in the specification as "carbon (C) attributable to the metal compounds and the stabilizer" (page 19, third to last and second to last line of the specification). One of

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ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the composition (including the organic precursor from which carbon is derived) and process steps (i.e. polycondensation of the precursor system to produce a sol-gel coating) taught by the reference are substantially identical to the composition and process steps recited in the claims and disclosed in the specification and therefore one of ordinary skill in the art would expect that the products taught by the references would be the same as applicant's claimed product, including the product's inclusion of carbon in the oxide film in the amount claimed.

"Where the claimed and prior art products are identical or substantially identical in structure or composition or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01. [emphasis added by examiner]

Likewise, with respect to the interfacial layer, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the coating taught by the reference is of the same composition (i.e. oxide) and is made by the same process step (i.e. sol-gel process) as recited in the claims and therefore one of ordinary skill in the art would expect that the products taught by the reference would be the same as applicant's claimed product, including the product's interfacial layer of the metal oxide film with R atom chemically bonded with a film forming metal atom through oxygen atom, MPEP 2112.01.

Response to Arguments

4. Applicant's arguments filed May 21, 2003 have been fully considered but they are not persuasive. Instant claims 9-10 and 14-17 remain pending in this application. In view of the terminal disclaimer, the obviousness double patenting rejection has been withdrawn. The newly added limitations have been addressed in the rejection recited above. In view of the fact that the new grounds for rejection were necessitated by applicant's amendment, this action is FINAL.

5. With respect to applicant's arguments that the reference fails to teach the presently claimed invention, the examiner disagrees (see rejection, above). Specifically, the newly added limitations are taught in paragraph [0031] of JP '906.

6. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., viscosity and ease of formation of the film) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

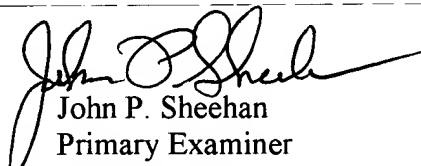
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L Oltmans whose telephone number is 703-308-2594. The examiner can normally be reached 7:00-3:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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July 31, 2003


John P. Sheehan
Primary Examiner
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